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10/783,038

02/23/2004

Kil-soo Jung

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EXAMINER

ADEGEYE, OLUWASEUN

ART UNIT

PAPER NUMBER

2621

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/783,038

Applicant(s)

JUNG ET AL.

Examiner

Oluwaseun A. Adegeye

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/23/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 33 is/are pending in the application.
- 4a) Of the above claim(s) 7, 14 - 20 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 6, 8 - 13 and 21 - 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/23/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 21, 22 and 25 have been considered but are moot in view of the new ground(s) of rejection.

2. ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

- Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101.

... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claim(s) **[29 - 31]** is/are rejected under 35 U.S.C. 101 because the claimed invention

is directed to non-statutory subject matter as follows. Claim(s) **[29 - 31]** define a

[computer readable recording medium] with descriptive material.

While "functional descriptive material" may be claimed as a statutory product (i.e., a

"manufacture") when embodied on a tangible computer readable medium, a **[signal,**

carrier wave, etc.] embodying that same functional descriptive material is neither a process nor a product (i.e., a tangible “thing”) and therefore does not fall within one of the four statutory classes of § 101. Rather, “signal” is a form of energy, in the absence of any physical structure or tangible material (as discussed in the instant application specification paragraph 0101, the medium could be a “carrier wave”).

Claims 8 – 13 and 21 – 28 are rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter as explained in the rejection of claims 29 – 31. Furthermore claims 8 – 13 and 21 – 28 are directed to functional descriptive material which are not embedded in a computer readable medium and therefore are non-statutory (MPEP 2106.01.I).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 6 and 29 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nonomura (US 2003/0108338 A1) in view of Gotoh et al (US 7,236,531 B1).

As to **claim 1**, Nonomura discloses a decoding apparatus for providing a browsable slide show (see [154] and [155]), the decoding apparatus comprising:

a mainstream decoder (fig. 23, 88), to decode mainstream packet data (see [95] and [251]);

a sub-audio decoder (fig. 23, 103, 104), to decode sub-audio packet data (see [255], [256]);

a mainstream system time clock counter, to provide a system time clock sequence which controls the decoding time of the mainstream packet data by the mainstream decoder (see [224]); and

a sub-audio system time clock counter, to provide a system time clock sequence which controls the decoding time of the sub-audio packet data by the sub-audio decoder (see [225] and [226]).

However Nonomura does not disclose two different STC counters.

Gotoh discloses two different STC counters (see fig. 4, fig. 5 and column 24, lines 49 – 52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used to separate STC counters taught by Gotoh to the apparatus of Nonomura to provide a multichannel display data generating apparatus having not-so-large circuitry scale (see column 3, lines 38 – 41).

As to **claim 29**, Nonomura discloses a computer-readable recording medium, on which a program enabling a decoding method is recorded (see [15] and [247]), the decoding method comprising:

generating a system time clock sequence for mainstream packet data, to control the decoding time of the mainstream packet data (see [224]);

decoding the mainstream packet data according to the system time clock sequence for the mainstream packet data (see [224]) ;

generating a system time clock sequence for sub-audio packet data, to control the decoding time of the sub-audio packet data (see [225]); and

decoding the sub-audio packet data according to the system time clock sequence for the sub-audio packet data (see [225] and [226]).

However Nonomura does not disclose two different STC counters.

Gotoh discloses two different STC counters (see fig. 4, fig. 5 and column 24, lines 49 – 52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used to separate STC counters taught by Gotoh to the apparatus of Nonomura to provide a multichannel display data generating apparatus having not-so-large circuitry scale (see column 3, lines 38 – 41).

As to **claim 32**, Nonomura discloses a decoding apparatus for providing a browsable slide show (see [154] and [155]), the decoding apparatus comprising:

a video decoder (fig. 23, 87) to decode video data provided to the apparatus (see [258]); and

an audio decoder (fig. 23, 100) to decode audio data provided to the apparatus (see [260]),

wherein the audio data is decoded independently of the video data to seamlessly reproduce the audio data during the browsable slide show when a forward play or a reverse play (see [242]) of the video data is selected (see [226]. Paragraph 228 discloses that audio is outputted based on the PTS accompanying the audio itself and not by any other PTS).

However Nonomura does not disclose two different STC counters.

Gotoh discloses two different STC counters (see fig. 4, fig. 5 and column 24, lines 49 – 52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used to separate STC counters taught by Gotoh to the apparatus of Nonomura to provide a multichannel display data generating apparatus having not-so-large circuitry scale (see column 3, lines 38 – 41).

As to **claim 2**, Nonomura discloses the decoding apparatus of claim 1, wherein the mainstream packet data comprises image data to be reproduced in a browsable slide show (see [94], [95], [154] and [155]).

As to **claim 3**, Nonomura discloses the decoding apparatus of claim 2, wherein the sub-audio packet data comprises audio data attached to the image data (see [225]).

As to **claim 4**, Nonomura discloses the decoding apparatus of claim 3, further comprising:

a mainstream buffer (94, 96) to store the image data (see [253] and [254]); and

a sub-audio buffer (99) to store the audio data (see [256]), wherein the apparatus can seamlessly reproduce the audio data when a forward or reverse play (see [242]) is selected during the browsable slide show (see [154] and [155]).

As to **claim 5**, Nonomura discloses the decoding apparatus of claim 2, wherein the mainstream system time clock counter provides a system time clock sequence to the mainstream decoder for each image included in the mainstream packet data (see [224]).

As to **claim 6**, Nonomura discloses the decoding apparatus of claim 1, wherein an output of the mainstream system time clock counter is initialized (reset) based on a predetermined reference value specified in the mainstream packet data (see [224]).

As to **claim 30**, grounds for rejecting claim 2 apply to claim 30 in its entirety.

As to **claim 31** grounds for rejecting claim 3 apply to claim 31 in its entirety.

5. Claims 8 – 13 and 21 – 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nonomura in view of Gotoh as applied to claims 1, 29 and 32 above, and further in view of Hamada et al (US 2002/0135608 A1).

As to **claim 21**, this claim differs from claim 29 only in that the limitation “the data storage medium comprising: a plurality of clips, including image data; a play list, including information on reproduction of each of the plurality of clips; and clip information, including information specifying a structure of each of the plurality of clips and information on a system time clock sequence of each image data” is additionally recited.

Hamada discloses the data storage medium comprising:

a plurality of clips, including image data (see [82] , [88] and [100] – [101]);

a play list, including information on reproduction of each of the plurality of clips
(see [82] and [85]); and

clip information, including information specifying a structure of each of the
plurality of clips and information on a system time clock sequence of each image data
(see [101] and [114]).

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to have added the plurality of clips, play list and clip information
taught by Hamada to the apparatus of Nonomura in view of Gotoh to enable data for
reproduction to be selected easily by adding a thumbnail representative of the data to
the data to be reproduced (see [008]).

As to **claim 8**, grounds for rejecting claim 21 apply to claim 8 in its entirety.

As to **claim 9**, Nonomura in view of Gotoh and Hamada discloses the data
storage medium of claim 8. However Nonomura in view of Gotoh does not disclose
wherein the play list comprises a plurality of play items, the plurality of play items having
a sequence that corresponds to an order for reproducing the plurality of play items.

Hamada discloses the data storage medium of claim 8, wherein the play list
comprises a plurality of play items (see fig 2 and [100]), the plurality of play items having
a sequence that corresponds to an order for reproducing the plurality of play items (see
[99] and [100]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the plurality of clips, play list and clip information taught by Hamada to the apparatus of Nonomura in view of Gotoh to enable data for reproduction to be selected easily by adding a thumbnail representative of the data to the data to be reproduced (see [008]).

As to **claim 10**, Nonomura in view of Gotoh and Hamada discloses the data storage medium of claim 9. However Nonomura in view of Gotoh does not disclose a file name of clip information, which contains information on a structure of the plurality of clips ;

a system time clock reference which contains information that specifies the system time clock sequence of the plurality of clips;

an in time which indicates a predetermined time between a presentation start time and a presentation end time of the system time clock sequence at which the image data of the corresponding clip is to be reproduced ; and

an out time which indicates a predetermined time at which the reproduction of the image data of the corresponding clip is to end.

However Hamada discloses wherein each of the plurality of play items comprises at least one of:

a file name of clip information, which contains information on a structure of the plurality of clips (see [114]);

a system time clock reference which contains information that specifies the system time clock sequence of the plurality of clips (see [122]);

an in time which indicates a predetermined time between a presentation start time and a presentation end time of the system time clock sequence at which the image data of the corresponding clip is to be reproduced (see [121] and [122]); and

an out time which indicates a predetermined time at which the reproduction of the image data of the corresponding clip is to end (see [121] and [122]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the plurality of clips, play list and clip information taught by Hamada to the apparatus of Nonomura in view of Gotoh to enable data for reproduction to be selected easily by adding a thumbnail representative of the data to the data to be reproduced (see [008]).

As to **claim 11**, Hamada discloses the data storage medium of claim 10, wherein the out time is set to the same value as the presentation end time (see [122]).

As to **claim 12**, Hamada discloses the data storage medium of claim 11, wherein the in time and the out time are used with motion picture image data (see [99], [100] and [122]).

As to **claim 13**, Hamada discloses the data storage medium of claim 21, wherein the clip information comprises:

sequence information which includes a number of system time clock sequences in a predetermined clip (see [114] and [122]),

a position to indicate a location of each of the system time clock sequences in the predetermined clip (see [114]),

a presentation start time of each of the system time clock sequences in the predetermined clip (see [122]), and

a presentation end time of each of the system time clock sequences in the predetermined clip (see [122]); and

characteristic point information (CPI) which includes an EP map, which includes information on a number of entry points of the predetermined clip (see [114]) ,

the position of a system time clock sequence corresponding to each of the system time clock sequences in the predetermined clip (see [114] and [122]), and

a presentation start time of each of the system time clock sequences in the predetermined clip (see [114] and [121] – [122]).

As to **claim 22**, this claim is similar to claim 13 only in that the limitation “the play list comprises a plurality of play items, and each of the play items includes, for each image, information an in time indicating an actual reproduction start time of the image and an out time indicating an actual reproduction end time of the image” is additionally recited.

Hamada discloses the play list comprises a plurality of play items, and each of the play items includes, for each image, information an in time indicating an actual reproduction start time of the image and an out time indicating an actual reproduction end time of the image (see [99], [120] and [121]).

As to **claim 23**, grounds for rejecting claim 11 apply to claim 23 in its entirety.

As to **claim 24**, Nonomura in view of Gotoh and Hamada discloses the data storage medium of claim 23. Hamada discloses wherein the in time and the out time are used with motion picture image data (see [122] and [123]).

As to **claim 25**, grounds for rejecting claim 22 apply to claim 25 in its entirety.

As to **claim 26**, Hamada discloses the data storage medium of claim 25, wherein information on the system time clock sequence of each image comprises pieces of information on a location of each image in each of the plurality of clips and reproduction starting time and reproduction ending time of each image (see [121] and [122]).

As to **claim 27**, Hamada discloses the data storage medium of claim 25, wherein the play list comprises a plurality of play items (see fig. 2 and [100]); and each of the plurality of play items includes pieces of information on actual reproduction start time and actual reproduction ending time of each image (see [121] and [122]).

6. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nonomura in view of Gotoh as applied to claims 21 and 25 above, and further in view of Hamada and Sawabe et al (US 2002/0176695 A1).

As to **claim 28**, Nonomura in view of Gotoh and Hamada discloses the data storage medium of claim 26. However they do not disclose wherein the reproduction ending time of each image is set to infinity.

Sawabe discloses wherein the reproduction ending time of each image is set to infinity (see [13] and [14]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the reproduction ending time of each image set to infinity as taught by Sawabe to the apparatus of Nonomura in view of Gotoh and Hamada to allow the still picture reproduction according to the author's intention for the record information to thereby carry out the variegated reproduction (see [008]).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2003/0152371 A1 discloses browsable slide shows on a DVD player.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiries

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oluwaseun A. Adegeye whose telephone number is 571-270-1711. The examiner can normally be reached on Monday - Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

01/14/2007

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